## ON PACHYCEPHALA MELANURA GOULD.

## By GREGORY M. MATHEWS.

Gould wrote: "The Pachycephala melanura is a native of the northern coasts of Australia, where it was procured by B. Bynoe, Esq., during the surveying voyage of H.M.S. the Beagle. It may be readily distinguished from the P. gutturalis and P. glaucura by the jet-black colouring of the tail (which organ is also shorter and more square than that of any other species), by its much longer bill, and by the colouring of the back of the neck and the under-surface being richer than that of either of those above named. I have not yet seen a female of this fine species. Whenever this sex is collected, it will be found to bear a very general resemblance to the females of P. gutturalis and P. glaucura."

Campbell described a bird as *Eopsaltria hilli* from Hecla Island, Parry Harbour, North-west Australia. I concluded this was the female of Gould's *Pachycephala melanura* and this decision was accepted by Campbell. The exact locality of Bynoe's bird being unknown, I designated Derby, as the males from there agreed accurately with the specimen figured as well as described by Gould.

Consideration of the forms for the purpose of figuring specimens for my Birds of Australia has shown that a reconsideration of values is necessary. In my List I associated all the forms under the name *Pachycephala pectoralis* (Latham), twelve subspecies being recognised, the differences in the males being considered of small value, while the females were not fully criticised owing to lack of material from northern localities.

The prevalent idea had been voiced by Campbell: "The general or common species (*P. gutturalis*) ranges from Rockingham Bay district, Queensland, round to South Australia, grading into the Black-tailed Thickhead (*P. melanura*) on the one hand at Cape York and Northern Territory, and on the

other hand into the Western Thickhead (*P. occidentalis*) of West Australin forests; while an insular form, the Grey-tailed (*P. glaucura*) takes possession of Tasmania and some of the intermediate islands in Bass Strait."

Such gradation would necessitate the acceptance of all the forms as subspecific; but while, apparently, this has been observed as to the males, it is negatived by examination of the females. As the result, I find three representative species occurring in Australia which are easily separable by the coloration of the females, which noticeably differs. Subspecies can be separated by the variation of the coloration of the tails of the males as well as the underparts of the females.

These three species occur on the west coast of Australia, while all the eastern up to Cape York are referable to one species.

Masters described a female from Cape York as *Pachycephala* robusta, which Ramsay, admitting, noted: "A doubtful species, being founded on a single specimen only, a female; must be compared with female of *P. melanura*, which varies much in size."

As this form, robusta, occurs outside Australia it may be necessary to alter the specific name when I monograph the species for my Birds of Australia, but this preliminary note serves to draw attention to the dangers of lumping, as undoubtedly three species have been confused. In the Catalogue of Birds in the British Museum two species were admitted, but as species and subspecies were there confused no criticism of that work is necessary. The name melanura was used for the group here called robusta, but its limits have been enlarged, incorrectly it appears, until Rothschild and Hartert wrote (Nov. Zool., Vol. XV., p. 364, 1908): "We are convinced that all the Pachycephala of the melanura-astrolabo group are subspecies of a single species."

The male of *melanura* agrees with Gould's description in being a smaller bird with shorter wing, shorter black tail, longer bill and brighter coloration, the secondaries and primaries edged with grey. Gould compared this bird with

south-western birds, which he considered were the same as the eastern form. But the typical form has a blackish tail.

The female from Derby does not appear to have yet been described. It is greyish above, the primaries and secondaries brown, their outer edges grey. The tail is green above, the inner-webs pale brown. The under-surface whitish, a very pale buffish band on lower throat, paler on lower abdomen, vent and under tail-coverts pale lemon-yellow; the lower aspect of tail pale brown, wing lining white, inner edge of primaries and secondaries white. Bill black.

At Port Hedland, the male differs in having the tail with a distinct wash of green towards the base of the inner-webs, the outer basal edges also tinged with green, the wing being longer, measuring 85 mm., while typical specimens measure 80 mm. This subspecies I will call *Pachycephala melanura bynoei* nov., the type being procured on the 22nd October, 1914.

It is as well to note that the nearest geographical relative to the south is *Pachycephala pectoralis occidentalis* Ramsay, which is as to the male, a larger bird with a longer tail and wing and shorter bill, a green wash on the outer edges of primaries and secondaries, and the tail with the base grey and the tips black. The female is quite different, being deep rufous below, with *no* yellow on the vent or under tail-coverts, the upper coloration also differing, the tail being greyish, etc., etc. This is the coloration of the females of the eastern forms, which range up to Cairns, but do not appear to inhabit Cape York.

From Hecla Island round to Cape York occurs the third species, whose males agree very well with that of *P. melanura*, but whose females disagree in being greyer above, the rump green, the tail black with the base more or less green only, the threat white, flecked with grey, remainder of under-surface pale lemon-yellow. The earliest name appears to be *robusta* Masters, but it is possible, as this species appears to be extra-limital, that an older name may exist.

One feature of interest may be here recorded: P. melanura and P. robusta only occur in the mangroves as far as records

go, while *P. pectoralis* is cited as a scrub or forest-loving bird. The three species may be divided thus:

Pachycephala melanura by noei (Mathews).

Port Hedland, Mid-west Australia.

Pachycephala melanura melanura (Gould).

Derby, North-west Australia.

Pachycephala robusta hilli (Campbell).

Hecla Island, Parry Harbour, North-west Australia.

Pachycephala robusta violetæ (Mathews).

Daly River, Interior Western Northern Territory.

Pachycephala robusta consobrina (Mathews).

Buchanan Island, Melville Island.

Pachycephala robusta borroloola (Mathews).

McArthur River, Eastern Northern Territory to Normanton. Differs from P. r. consobrina in being more orange-yellow below.

Pachycephala robusta robusta (Masters).

Cape York, North Queensland.

Pachycephala pectoralis queenslandica (Reichenow).

North Queensland.

Pachycephala pectoralis ashbyi (Mathews). South Queensland.

Pachycephala pectoralis pectoralis (Latham). New South Wales.

Pachycephala pectoralis youngi (Mathews). Victoria.

Pachycephala pectoralis glaucura (Gould).

Tasmania.

Pachycephala pectoralis fulginosa (Vigors and Horsfield). South Australia.

Pachycephala pectoralis occidentalis (Ramsay).
South-west Australia.

Here is a good example of the discrimination necessary between representative species and subspecies, as here are seen three species which are not yet known to inhabit the same districts, but cover the whole of Australian coastal districts, as they are not birds of the interior.

Birds from Coomooboolaroo, Queensland, were considered to belong to *melanura* by Campbell, but the females in my possession prove them to belong to the form of *pectoralis* I have called *ashbui*.

The Kangaroo Island bird is now regarded as inseparable from the mainland South Australian form.

This short note is not intended to be exhaustive, as I will so treat the species in my big work.

While looking up the above matter I noticed that Gould determined his own *Pachycephala inornata* as the immature of *P. gilbertii*. As it had priority and was being used in a different sense, I re-examined specimens in conjunction with the descriptions, and must agree with Gould's conclusion. Consequently the species name must be altered, and we will have

Gilbertornis inornatus inornatus (Gould).

South Australia.

Gilbertornis inornatus gilbertii (Gould).

West Australia.